Amendments to the Specification:

At line 22 of page 2 please insert the following heading:

--Brief Description of the Drawings--

At line 29 of page 2 please insert the following paragraph:

--Figure 2 is a block diagram of a method which is in accordance with an embodiment of the present invention.--

At line 14 of page 3 please insert the following paragraphs:

--Specifically, as shown in Figure 2, an embodiment of the present invention provides a PVD process for coating substrates, wherein the substrate is pre-treated in the vapour of a pulsed, magnetic field-assisted cathode sputtering operation, and during pre-treatment a magnetic field arrangement of a magnetron cathode, with a strength of the horizontal component in front of the target of 100 to 1500 Gauss, is used for magnetic field-assistance, and wherein after pre-treatment further coating is effected by means of cathode sputtering, with the power density of the pulsed discharge during pre-treatment being greater than 1000 $W.cm^{-2}$.

Preferably, the power density falls within the range from 2000 to 3000 $W.cm^{-2}$. Preferably, the pulse duration (on-time) ranges between 10 and 1000 µs, and the pulse interval (repetition period) is between 0.2 ms and 1000 s. Preferably, the pulse duration is 50 µs and the pulse interval is 20 ms. Preferably, magnetron discharge is distributed over a cathode surface area and occupies at least 50 % of the surface area. Preferably, the discharge is distributed over

70-90 % of a cathode surface area. Preferably, an average pulsed discharge current density is less than 10 $A.cm^{-2}$. Preferably, the localised maximum pulsed discharge current density is less than 100 $A.cm^{-2}$. Preferably, pulses which are generated have a peak voltage from 0.5 to 2.5 kV. Preferably, pre-treatment with a magnetic field-assisted cathode sputtering is conducted in a non-reactive atmosphere, selected from a group consisting of Ne, Ar, Kr and Xe, with targets which included material selected from a group consisting of Cr, V, Ti, Zr, Mo, W, Nb and Ta. Preferably, pre-treatment is effected with Ar in the pressure range from 10^{-5} to 10^{-1} mbar. Preferably, pre-treatment is effected with Ar at a pressure of 10^{-3} mbar. Preferably, during pre-treatment a negative bias voltage within the range from 0.5 to 1.5 kV is applied to the substrates, so that an etching or cleaning process is initiated simultaneously with an ion implantation process (ABS technique). Preferably, the negative bias voltage is pulsed with pulse widths of 2 µs to 20 ms and a pulse interval which is likewise 2 µs to 20 ms. Preferably, the coating formed by cathode sputtering consists of the nitrides TiN, ZrN, TiAlN, TiZrN, TiWN, TiNbN, TiTaN, TiBN or the carbonitrides TiCN, ZrCN, TiAlCN, TiZrCN, TiVCN, TiNbCN, TiTaCN or TiBCN. Preferably, the coating contains 0.1 to 5 atomic % of an element selected from the group of Sc, Y, La and Ce. Preferably, the coatings consist of nanometre-scale multi-layer coatings with a periodicity of 1 to 10 nm, from the group comprising TiN/TiAlN, TiN/VN, TiN/NbN, TiN/TaN, TiN/ZrN, TiAlN/CrN, TiAlN/ZrN, TiAlN/VN, CrN/NbN, CrN/TaN, CrN/TiN, Cr/C, Ti/C, Zr/C, V/C, Nb/C or Ta/C. Preferably, one of the cited individual layers contains 0.1 to 5 atomic % of an element selected from the group of Sc, Y, La and Ce. Preferably, both of the cited individual layers contain 0.1 to 5 atomic % of an element selected from the group of Sc, Y, La and Ce.

Preferably, the cathode sputtering employed during coating is unbalanced magnetron sputtering. Preferably, identical cathodes and identical magnetic field arrangements are used for pre-treatment and coating. Preferably, specific adaptations of the magnetic field strength are made, by adjusting the distance of a magnet array from a target surface, in order to optimise the pre-treatment and coating operations.--